TABLE OF CONTENTS:

Welding Properties (Cont.)

AVAILABLE: Library of Congress VK/lsb
2-10-60

Card 3/3

YELISTRATOV, P.S., kand.tekhn.nauk

Depth of fusion of cast iron during hard facing with a steel electrode. Svar. proizv. no.4:20-21 Ap '61. (MIRA 14:3)

1. Bryanskiy institut transportnogo mashinostroyeniya.
(Cast iron) (Hard facing)

YELISTRATOV, P.S.; SERPIK, N.M.

Effect of the removal by flame of steel casting defects on the quality of welded joints. Lit.proizv. no.11:36-38 N '61.
(MIRA 14:10)

(Steel castings—Finishing)
(Welding—Testing)

YELISTRATOV, P.S.

Welding-up of defects on machined surfaces of large cast iron parts.
Stan.i instr. 32 no.12:36 D '61. (MIRA 14:12)
(Electric welding)

YELISTRATOV, P. S.

Characteristic of methods of welding-up iron castings. Lit. proizv. no.10:11 O '62. (MIRA 15:10)

(Cast iron—Welding)

YELISTRATOV, P. S., kand. tekhn. nauk

Organizing the area for correcting the defects of iron castings. Mashinostroenie no.5:99-101 S-O '62. (MIRA 16:1)

1. Mogilevskiy mashinostroitel'nyy institut.

(Iron founding)

YELISTRATOV, P.S., kand. tekhn. nauk

Accounting for waste in iron casting. Mashinostroenie no.5: 75-76 S-O '63. (MIRA 16:12)

1. Mogilevskiy mashinostroitel'nyy institut.

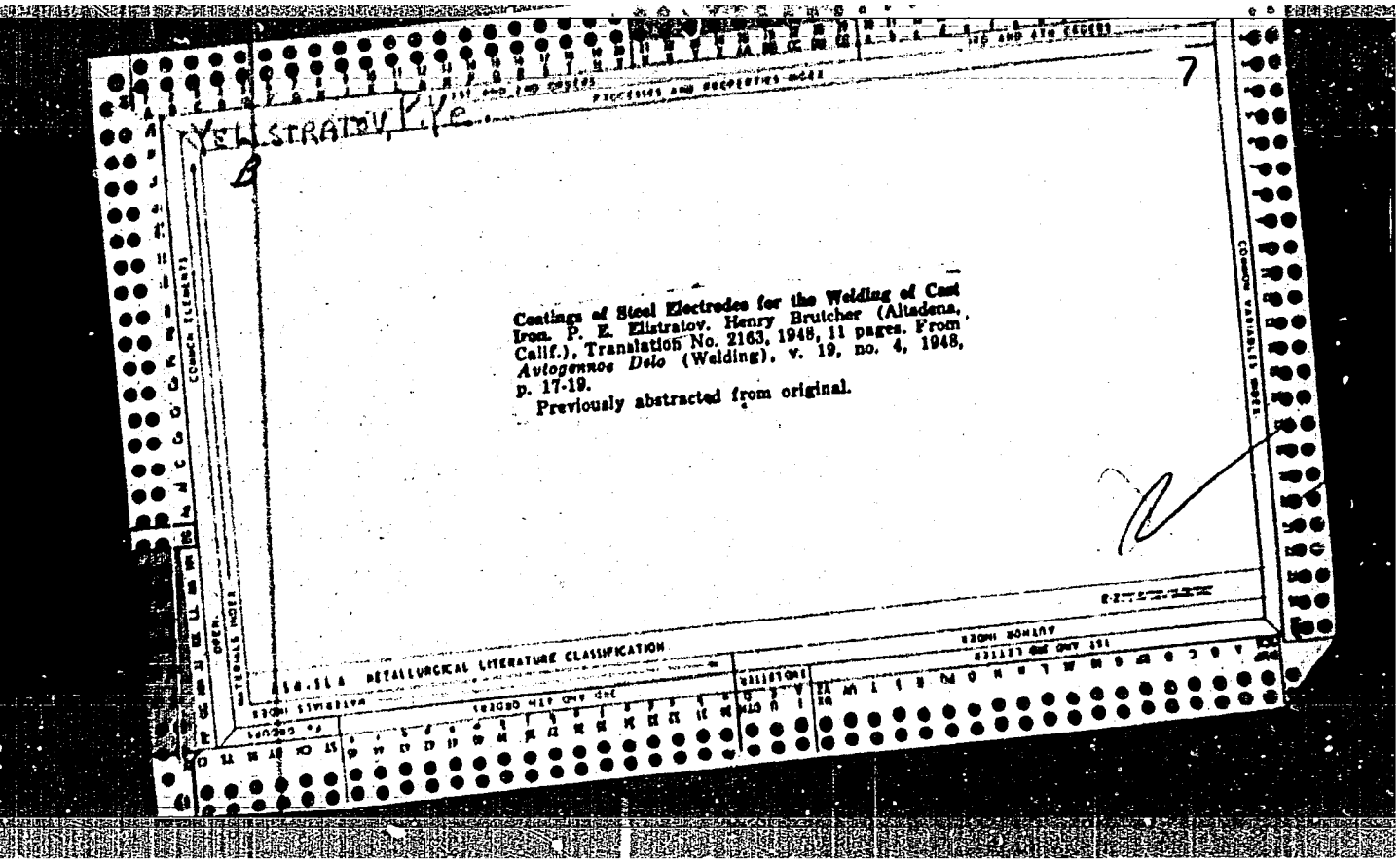
YELISTRATOV, P.S.

Preventing the formation of cracks in the welding-up of iron castings. Lit.proizv. no.10:34-35 O '64. (MIRA 18:4)

YELISTRATOV, P.S., kand.tekhn.nauk, dotsent

Selecting optimum conditions for welding cast iron. Vest. mashinostr. 45 no.8:51-52 Ag '65.

(MIRA 18:12)



YELISTRATOV, P.Ye.

B

7

Coatings of Steel Electrodes for the Welding of Cast Iron. P. E. Elistratov. Henry Brutcher (Altadena, Calif.), Translation No. 2163, 1948, 11 pages. From *Avtogennoe Delo* (Welding), v. 19, no. 4, 1948, p. 17-19.

Previously abstracted from original.

METALLURGICAL LITERATURE CLASSIFICATION

YELISTRATOV, S. (g.Kimry, Kalininskoy obl.)

Shoe manufacture firm in Kimry. Mest.prom.i khud.promys. 3 no.7:12-13 Jl '62. (MIRA 15:8)
(Kimry--Shoe industry)

YELISTRATOV, S., podpolkovnik

These are our rocket troops. Voen. znan. 37 no. 1:6-7 Ja '61. (MIRA 14:1)

(Rockets (Ordnance))

YELISTRATOV, S. (Ufa)

Life span is prolonged. Mest.prom.i khud.promys. 3 no.3:11-12 Mr '62. (MIRA 15:3)

(Ufa--Washing machines)

YELISTRATOV, S. (g.Ul'yanovsk)

They came to visit Il'ich. Mest.prom.i khud.promys. 3 no.4: 4-5 Ap '62. (MIRA 15:5)
(Ul'yanovsk--Lenin, Vladimir Il'ich, 1870-1924--Museums, relics, etc.)

YELISTRATOV, S. (g.Kishinev)

Ultrasonic waves and paints. Mest.prom.i khud.promys. 3 no.1:10 Ja '62. (MIRA 15:2)
(Kishinev--Paint industry)

KAZANTSEV, Anatoliy Mikhaylovich, dots., kand. tekhn. nauk;
KALININ, Boris Arkhipovich, inzh.; SHANIN, Yu.N., retsenzent;
RZHECHITSKIY, B.D., retsenzent; YELISTRATOV, S.I., red.;
LOBANOV, Ye.M., red. izd-va; RIDNAYA, I.V., tekhn. red.

[Establishing work norms for loading and unloading work] Normirovanie truda na pogruzochno-razgruzochnykh rabotakh. Moskva, Izd-vo "Rechnoi transport," 1962. 196 p. (MIRA 15:7)
(Loading and unloading--Production standards)

YELISTRATOV, S. (Kalinin); PARCHEVSKIY, V. (Rostov-na-Donu); KUL'NEV, V., inzh.

Summer is not far. Mest.prom.i khud.promys. 3 no.5:32-34 My '62. (MIRA 15:6)

(Beverages)

GLAZKOV, Mikhail Mikhaylovich; YELISTRATOV, S.I., retsenzent; SIDOROV, P.P., red.; LOBANOV, Ye.M., red. izd-va; RIDNAYA, I.V., tekhn. red.

[Business accounting in a harbor section; from the work practice of the Moscow Western Harbor] Khozraschet uchastka porta; iz opyta raboty Moskovskogo Zapadnogo porta. Moskva, Izd-vo "Rechnoi transport," 1963. 37 p. (MIRA 16:10)

(Moscow--Port districts--Finance)
(Loading and unloading)

SOV/137-57-1-800

Translation from: Referativnyy zhurnal. Metallurgiya, 1957, Nr 1, p 103 (USSR)

AUTHORS: Yelistratov, S. S., Redin, P. P.

TITLE: Continuous Casting Machines (Mashiny nepreryvnogo lit'ya)

PERIODICAL: V sb.: Proizvoditel'nost' truda na Stalingr. trakt. z-de. Stalingrad, Knigoizdat, 1955, pp 119-125

ABSTRACT: The installation of continuous casting of iron scouring spiders into metallic molds (M) afforded a 400-500% increase in the wear resistance of the spiders; the utilization of the metal from the gates as the cleansing pieces instead of its going to waste; and a decrease of the labor consumption of the production. M with vertical joints are set one against the other on the links of an endless slat-bushing chain, and the casting is carried out with M in continuous motion rounding the strain sprocket wheel and passing into the lower position. This automatically causes the M halves to open and drop out the castings. In order to simplify the repairs and replacement of M they are constructed in the form of inserts attached to the rings by bolts. The ready replaceability of the M permits the use of the machine for casting other articles differing slightly in weight and shape.

Card 1/2

SOV/137-57-1-800

Continuous Casting Machines

The M serve for some 35,000 castings. The M are coated with a paste of the following composition (in %): Black graphite 44.8, fireclay 2.5, powdered dextrin 2.2, and water.

S. Sh.

Card 2/2

YELISTRATOV, S.S.

BEREZIN, P.G.; YELISTRATOV, S.S.; REDIN, P.P.

Mechanization of casting in permanent molds. Lit. proizv. no.1: 38-39 Ja '61. (MIRA 14:1)
(Foundries--Equipment and supplies)
(Machine molding (Founding))

BEREZIN, P.G., kand.tekhn.nauk, dotsent; DANILIN, V.I., inzh.; ZVEREV, A.A., inzh.; YELISTRATOV, S.S., dotsent; ZAMECHNIK, F.F., inzh.; REDIN, P.P., inzh.

Improving the quality of cast iron for molds. Stal' 21 no.6:571-575 Je '61. (MIRA 14:5)

1. Stalingradskiy mekhanicheskiy institut i zavod "Krasnyy Oktyabr'."
(Cast iron) (Ingot molds)

BEREZIN, P.G.; DANILIN, V.I.; YELISTRATOV, S.S.; ZVEREV, A.A.; ZAMECHNIK, F.F.

Efficient technology for the founding of large cast iron ingot molds. Stal' 23 no.2:181-184 F '63. (MIRA 16:2)

1. Volgogradskiy mekhanicheskiy institut i zavod "Krasnyy Oktyabr'".
(Iron founding) (Ingot molds)

NIKONOV, B.; YELISTRATOV, V.

Pickling baths with a steel shell. Metallurg 7 no.3:32-33 Mr '62.
(MIRA 15:2)

1. Metallurgicheskiy zavod "Krasnaya Etna".
(Metals--Pickling)
(Chemistry, Metallurgic--Equipment and supplies)

YELISTRATOV4V8A8 600

1. YELISTRATOV, V.A.

2. USSR (600)

"New method for determining the flexure of astronomical instruments," Astron. Zhur., 17, No 2, 1940. Pulkovo observatory (submitted Mar 1938)

9. [redacted] Report U-1518, 23 Oct 1951

YELISTRATOV, V. A.

Astronomical Instruments

Δ δs variations of the meridian circle of the Main Astronomical Observatory. Izv. Glav. astron. obs. 19 no. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

YELISTRATOV, V.A.

Investigating circles by the "rosette" method. Izv.Glav. astron.obser. 19 no.3:18-30 '53. (MLRA 7:1)
(Astronomy, Spherical and practical)

YELISTRATOV, V.A.

GORDON, Ya.Ye.; YELISTRATOV, V.A.

Study of errors made in graduating the Pulkovo meridian circle.
Izv.Glav.astron.obser. 19 no.3:31-55 '53. (MLRA 7:1)
(Transit circle)

Yelistratov, V.P.

YELISTRATOV, V.P.; BALASHOV, L.Ye.; LANIN, V.D. (Shcherbakovskaya ul. d. 44-a, Moskva).

What we demand from architects and builders. Gor. khoz. Mosk. 32 no.2:8-9 F '58. (MIRA 11:1)

1. Chleny obshchestvennoy komissii sodeystviya pri domoupravlenii. (Moscow--Apartment houses)

YELISTRATOV, V.S.; BIRYUKOV, L.P.; NASYROV, M.Sh.

Restoring the worn out parts of oil field equipment in the First of May Oil Well Drilling Trust. Mash. i neft. obor. no.9:38-40 '64. (MIRA 17:11)

1. Trest "Pervomayburneft'".

YELISTRATOV, V.S.; BIRYUKOV, L.P.

Starting gate with a remote control system with quickly replaceable wearing parts. Mash. i neft. obor. no.8:33-34 '65. (MIRA 18:9)

1. Trest "Pervomayburneft'".

YELISTRATOV, Ye. M.

"Values Obtained by Radiographic Examinations of Mixed Crystals and Metallic Alloys."

report presented at the Conference on Investigation of Mechanical Properties of Non-Metals, by the Intl. Society of Pure and Applied Physics and the AS USSR, at Leningrad, 19-24 May 1958.
(Vest, Ak Nauk SSSR, 1958, no. 9, pp. 109-111)

YELISTRATOVA, L.L.; TEREKHINA, A.Ye.; BRYANTSEVA, N.N.

Determining physicochemical properties of unstable natural gasoline. Gaz. delo no.9:29-31 '65. (MIRA 18:9)

1. Otradnenskiy gazobenzinovyy zavod.

83145
S/170/60/003/006/011/011
B013/B067

16.4400
AUTHOR: Yelistratova, M. V.

TITLE: A Finite Integral Hankel Transform

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 6, pp. 120 - 125

TEXT: In this paper, a finite integral Hankel transform is obtained by means of which, for axisymmetric bodies, the boundary problem of the second kind can be solved for equations permitting partial solutions in the cylindrical coordinate system and representing a Bessel equation of the m-th order after separation of variables. The transform is obtained by finding the eigenfunctions of the Sturm - Liouville problem. This method reveals the dependence of finite integral transforms on boundary conditions and on the geometrical form of bodies, and gives the algorithm according to which finite integral transforms with other kernels can be found. N. G. Shimko and P. P. Yushkov are mentioned. There are 5 Soviet references.

Card 1/2

83145

A Finite Integral Hankel Transform

S/170/60/003/006/011/011
B013/B067

ASSOCIATION: Industrial'nyy institut, g.Kuybyshev (Industrial Institute, Kuybyshev)

Card 2/2

28660
S/020/61/140/002/005/023
C111/C444

16,4500

AUTHOR: Yelistratova, M. V.

TITLE: The finite Hankel integral transformations

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 140, no. 2, 1961, 295-298

TEXT: In order to obtain new integral transformations one uses expansions in terms of eigen-functions.

Let

$$f(x) = \sum_n \frac{\int_a^b xQ_n(\lambda,x)f(x)dx}{\int_a^b xQ_n^2(\lambda,x)dx} Q_n(\lambda,x) \qquad (1)$$

be the Fourrier expansion of f(x) in terms of the eigenfunctions of the Sturm-Lionville problem

$$(xu')' + \left[\lambda^2 x - \frac{m^2}{x}\right] u(x) = 0, \quad a \leq x \leq b, \quad h \geq 0, \quad H \geq 0; \qquad (2)$$

$$u' - hu\Big|_{x=a} = 0; \quad u' + Hu\Big|_{x=b} = 0$$

Card 1/6

The finite Hankel integral . . .

where the prime denotes the differentiation with respect to $\lambda_n x$.

The eigenfunctions are

$$Q_m(\lambda_n x) = \lambda_n V_m(\lambda_n x) + HW_m(\lambda_n x) \quad (3)$$

with

$$V_m(\lambda_n x) = Y'_m(\lambda_n b)\, J_m(\lambda_n x) - J'_m(\lambda_n b) Y_m(\lambda_n x), \quad (4)$$

$$W_m(\lambda_n x) = Y_m(\lambda_n b) J_m(\lambda_n x) - J_m(\lambda_n b)\, Y_m(\lambda_n x)$$

The eigenvalues λ_n are the positive roots of

$$\lambda_n^2 V'_m(\lambda_n a) + H\lambda_n W'_m(\lambda_n a) - h\lambda_n V_m(\lambda_n a) - hHW_m(\lambda_n a) = 0 \quad (5)$$

The finite integral transformation

$$\overline{f}(\lambda_n) = \int_a^b x \left[\lambda_n V_m(\lambda_m x) + HW_m(\lambda_n x)\right] f(x)\, dx \quad (8)$$

Card 2/6

The finite Hankel integral . . .

and its inversion, which is obtained from the representation for f(x)

$$f(x) = \frac{\pi^2}{2} \sum_n \times$$

$$\times \frac{\lambda_n^2 [\lambda_n J'_m(\lambda_n a) - hJ_m(\lambda_n a)]^2 \int_a^b x [\lambda_n V_m(\lambda_n x) + HW_m(\lambda_n x)] f(x)\,dx}{\frac{b^2\lambda_n^2 - m^2 + b^2H^2}{b^2} [\lambda_n J'_m(\lambda_n a) - hJ_m(\lambda_n a)]^2 - \frac{a^2\lambda_n^2 - m^2 + a^2h^2}{a^2} [\lambda_n J'_m(\lambda_n b) + HJ_m(\lambda_n b)]^2} \times$$

$$\times Q_m(\lambda_n x). \qquad (*)$$

are called the Hankel transformation. For special values of h and H one obtains the well-known finite Hankel transformations.

The investigation of the case $a \to 0$ shows that for $m < 1/2$ the Hankel transformation

$$\overline{f}(\lambda_n) = \int_0^b x \left[CJ_m(\lambda_n x) + \lambda_n^{2m} J_{-m}(\lambda_n x) \right] f(x)\,dx,$$

Card 3/6

The finite Hankel integral . . .

may be introduced, where C is an arbitrary constant, and the λ_n are the positive roots of

$$\lambda_n^{2m}\left[\lambda_n J'_{-m}(\lambda_n b) + HJ_{-m}(\lambda_n b)\right] + C\left[\lambda_n J'_m(\lambda_n b) + HJ_m(\lambda_n b)\right] = 0 \quad . \quad (10)$$

It is shown that the transformation (8) - (7) can be used for an effective solution of third order boundary value problems, if the homogenous equation, corresponding to the given equation, at least allows a partial separation of the variables.

Given is the problem

$$\frac{1}{r}\frac{\partial}{\partial r}\left(r\frac{\partial u}{\partial r}\right) - \frac{m^2}{r^2}u + D_1(z,\theta,t)u = f(r,z,\theta,t) \qquad (14)$$

$$\frac{\partial u}{\partial r} - hu\Big|_{r=r_0} = F_1(z,\theta,t); \quad \frac{\partial u}{\partial r} + Hu\Big|_{r=R} = F_2(z,\theta,t); \quad h \geqslant 0; \quad H \geqslant 0 \qquad (15)$$

If (14) is multiplied with $r\,Q_m(\lambda_n r)$, where $Q_m(\lambda_n r)$ are the eigen-

Card 4/6

The finite Hankel integral . . .

functions of the problem (2), and integrated over r form r_o to R, one obtains the equation

$$D_1\bar{u}(\lambda_h) - \lambda_n^2 \bar{u}(\lambda_n) = r_o Q_m(\lambda_n r_o) F_1(z,\theta,t) - RQ_m(\lambda_n R) F_2(z,\theta,t) + \int_{r_o}^{R} rQ_m(\lambda_n r) f\, dr \qquad (16)$$

which does not contain r and includes the boundary conditions for r. The solution searched for is then

$$u = \frac{\pi^2}{2}\sum_n \left\{\left[\lambda_n^2[\lambda_n J'_m(\lambda_n r_0) - hJ_m(\lambda_n r_0)]^2 \int_{r_0}^{R} r[\lambda_n V_m(\lambda_n r) + HW_m(\lambda_n r)]\, u\, dr\right]\left[\frac{R^2\lambda_n^2 - m^2 + R^2H^2}{R^2}[\lambda_n J'_m(\lambda_n r_0) - hJ_m(\lambda_n r_0)]^2 - \frac{r_0^2\lambda_n^2 - m^2 + r_0^2h^2}{r_0^2}[\lambda_n J'_m(\lambda_n R) + HJ_m(\lambda_n R)]^{-1} Q_m(\lambda_n r)\right\}. \qquad (17)$$

Card 5/6

28660
S/020/61/140/002/005/023
C111/C444

The finite Hankel integral . . .

where the summation in (17) is carried out over all positive roots of (5).

There is 1 Soviet-bloc and 1 non-Soviet-bloc reference. The reference to English-language publication reads as follows: G. N. Vatson, Teoriya besselevykh funktsiy, ch. 1, JL, 1949 [Watson, Theory of Bessel functions, Part I].

ASSOCIATION: Kuybyshevskiy industrial'nyy institut imeni V. V. Kuybysheva (Kuybyshev Industrial Institute imeni V. V. Kuybyshev)

PRESENTED: May 3, 1961, by J. N. Vekua, Academician

SUBMITTED: April 27, 1961

Card 6/6

YELISTRATOVA, M.V.

Using the Hankel conversion for solving a boundary-value problem for the equation of the unsteady gas flow in a porous medium. Trudy Giprovostoknefti no.5:125-128 '62. (MIRA 16:8)

(Gas flow)

L 13070-63 EWT(d)/FCC(w)/BDS AFFTC IJP(C)

ACCESSION NR: AP3000951 S/0140/63/000/003/0044/0051

51

AUTHOR: Yelistratova, M. V. (Kuyby*shev)

TITLE: Finite integral Henkel transformations 16

SOURCE: IVUZ. Matematika, no. 3, 1963, 44-51

TOPIC TAGS: Hankel transformation, Bessel equation, variable separation, boundary value problem

ABSTRACT: The author develops a theory of Hankel transforms depending on certain eigenfunction expansions. She shows that the given finite integral transform is useful for solving boundary value problems of third type of equations for which the corresponding homogeneous equations permit at least a partial separation of variables and lead, with respect to the separation of variables, to a Bessel equation for a hollow cylindrical body. Orig. art. has: 46 formulas.

ASSOCIATION: none

SUBMITTED: 28Jul60 DATE ACQ: 12Jun63 ENCL: 00

SUB CODE: 00 NO REF SOV: 002 OTHER: 003

Card 1/1

YELISTRATOVA, T.A.

LEDNEV, N.A., professor; GROSHEV, A.V.; YELISTRATOVA, T.A., NIKITIN, B.D.; PENTKOVSKIY, M.V.; PREOBRAZHENSKIY, M.A.; RUSHINSKIY, L.M.

[Practical mathematical work on calculating machines and instruments] Matematicheskii praktikum na schetnovychislitel'nykh priborakh i instrumentakh. Moskva, Gos. izd-vo "Sovetskaia nauka," 1954. 365 p. (MLRA 7:7)
(Calculating machines) (Approximate computation)

SHMELEV, P.A.; YELISTRATOVA,T.A., red.

[Surfaces in analytic geometry] Poverkhnosti v analiticheskoi geometrii. Red. T.A.Elistratova. Moskva, Mosk. energ. in-t, 1962. 59 p. (MIRA 17:3)

YELISTRATOVA, T.A.; SULEYMANOVA, Kh.R.; SHUMOV, A.S.; LURLAK, M.F., red.

[Problems for a course in higher mathematics] Sbornik zadach po kursu vysshei matematiki. Moskva, Vysshaia shkola. No.4. 1964. 204 p. (MIRA 18:5)

YELISTRATOVA, T. S. Cand Agr Sci -- (diss) "Structural peculiarities of the root systems of tree and shrub varieties under conditions of northern Pribalkhash'ye, as a basis for agricultural engineering of forest cultivation." Alma-Ata, 1957. 20 pp 1 sheet of tables, 20 cm. (Min of Agr USSR. Min of Agr Kazakh SSR. Kazakh State Agr Inst), 100 copies (KL, 24-57, 119)

YELISTRATOVA, V.

New trends, new ideas. Obshchestv. pit. no.11:13-15 N '61.
(MIRA 15:2)

1. Zamestitel' nachal'nika Upravleniya obshchestvennogo pitaniya Ministerstva torgovli Gruzinskoy SSR.
(Tiflis--Restaurants, lunchrooms, etc.)

YELISTRATOVA, Z. A.

YELISTRATOVA, Z. A. "Iron sesquichloride as a phenol activator", Trudy Tsentr. nauch.-issled. dezinfekts. in-ta, Issue 5, 1949, p. 96-98.

SO: U-463 1, 16 Sept 53, (Letopis 'Zhurnal 'nykh Statey, No. 24, 1949).

YELISTRATOVA, Z. A.; GANDEL'SMAN, B. I. and KAVENOKI, F. Ya.

"The Effect of Desiccation on the Period of Survival of Hiss-Flexner Dysentery Bacilli," Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 1, 1953.

Central Scientific Research Disinfection Institute

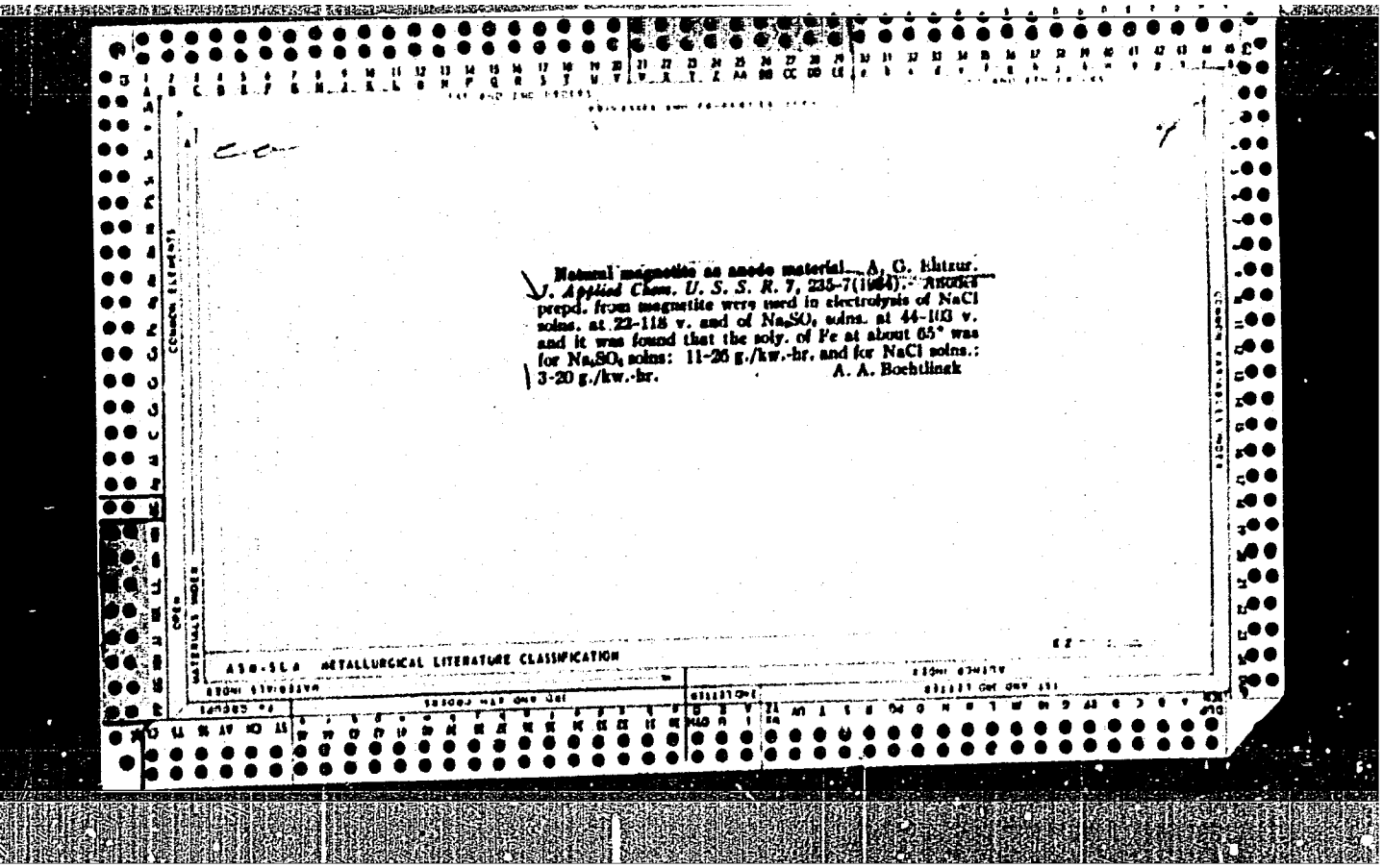
YELITENKO, I. L.

Forestry Engineering

Mechanizing construction work, Les. khoz., 5 No. 3(42), 1952

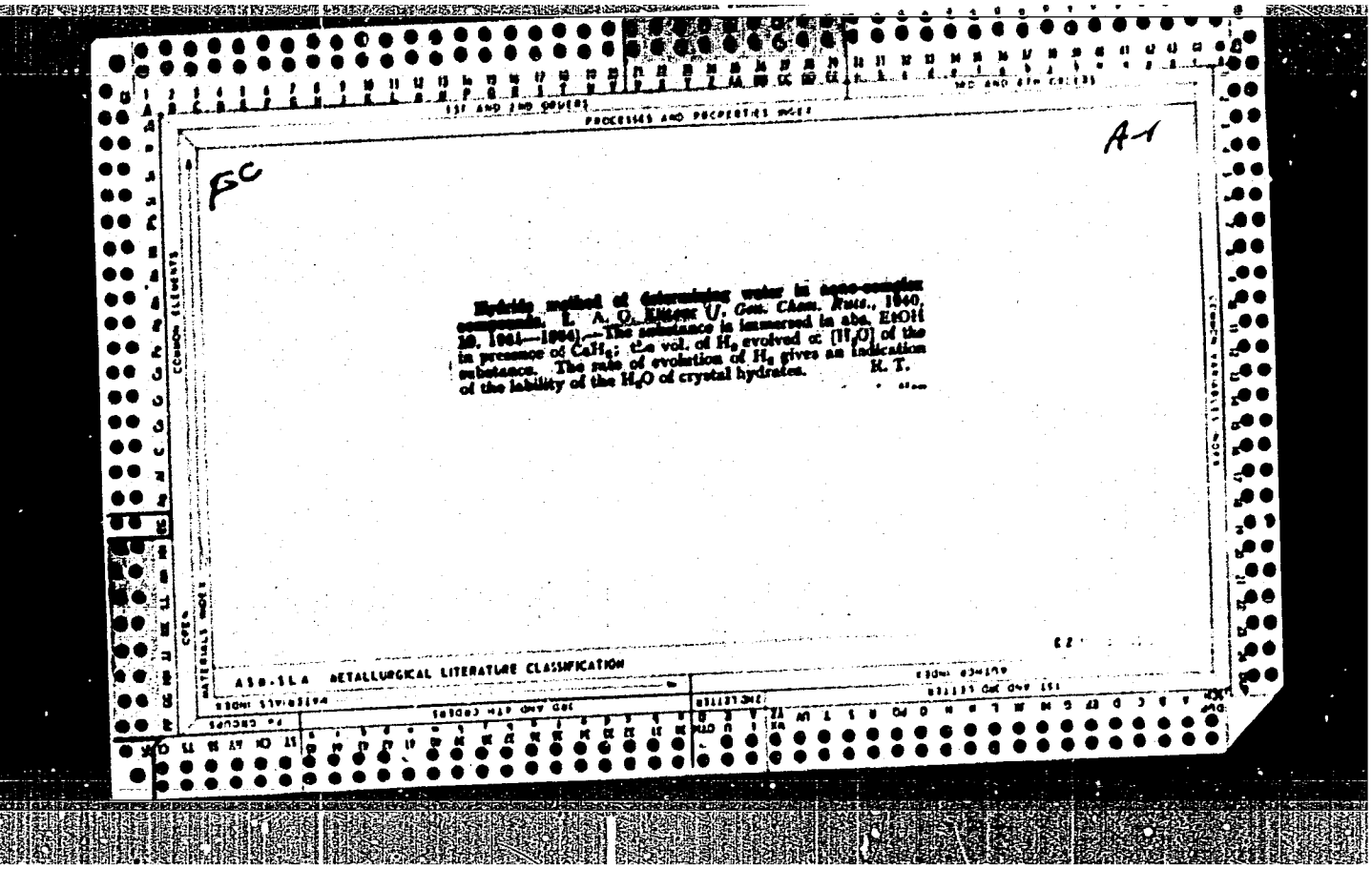
Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

YELITENKO, Ye. I. Cand Tech Sci — (diss) "Regularities in the Formation of Microbubbles in a Flotation Machine in Relation to the Hydrodynamic and Thermodyamic Operating Conditions of the Impeller," Moscow, 1960, 28 pp, 200 copies (Moscow Mining Institute im Stalin) (KL, 46/60, 125)

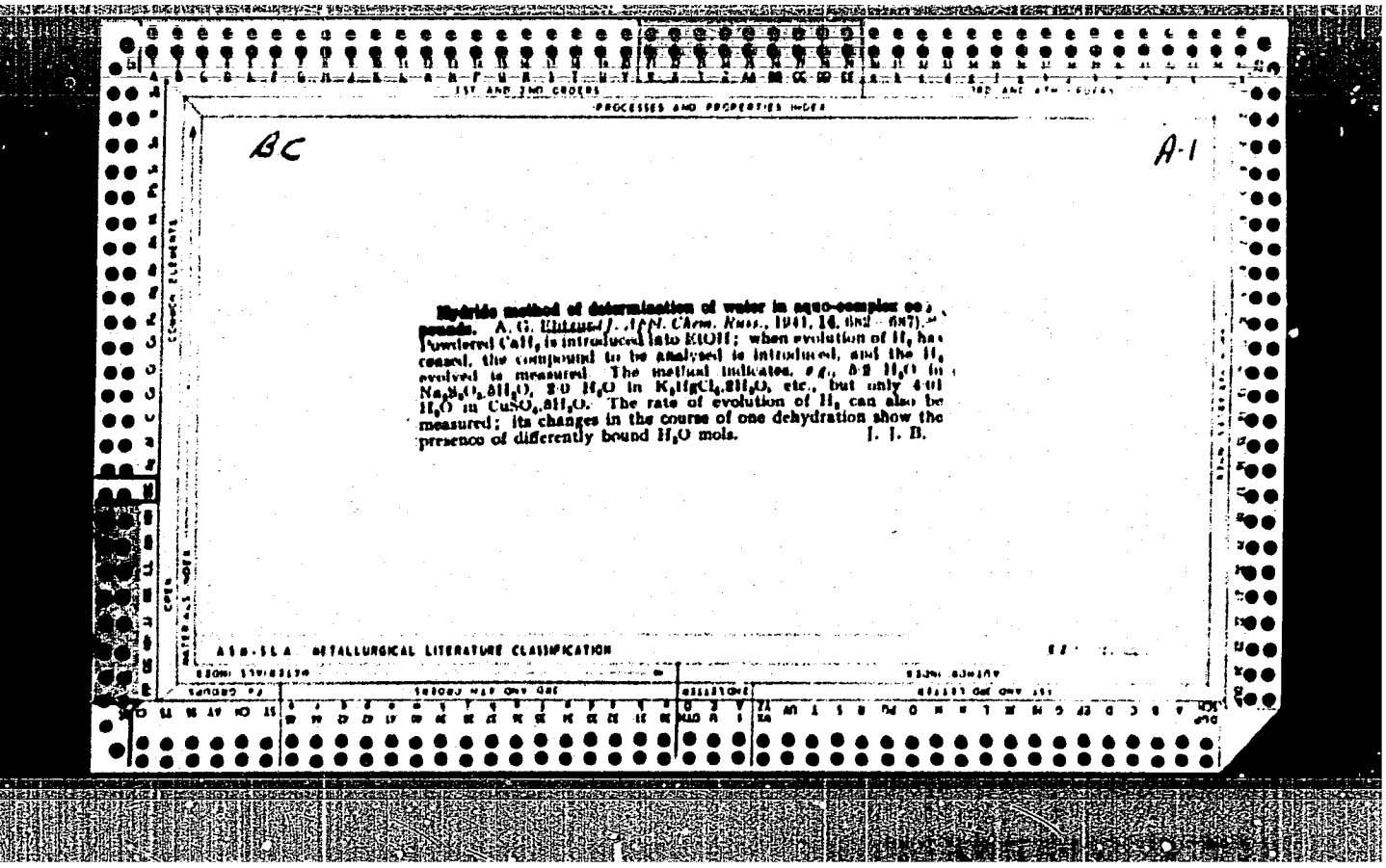


Natural magnetite as anode material. A. G. Blazur. *J. Applied Chem. U. S. S. R.* 7, 235-7(1934).—Anodes prepd. from magnetite were used in electrolysis of NaCl solns. at 22-118 v. and of Na_2SO_4 solns. at 44-103 v. and it was found that the soly. of Fe at about 65° was for Na_2SO_4 solns: 11-26 g./kw.-hr. and for NaCl solns.: 3-20 g./kw.-hr. A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Hydride method of determining water in nano-complex compounds. I. A. O. Ellezer U. *Gen. Chem. Russ.*, 1940, 10, 1961—1964).—The substance is immersed in abs. EtOH in presence of CaH_2; the vol. of H_2 evolved cc. $[H_2O]$ of the substance. The rate of evolution of H_2 gives an indication of the lability of the H_2O of crystal hydrates. H. T.



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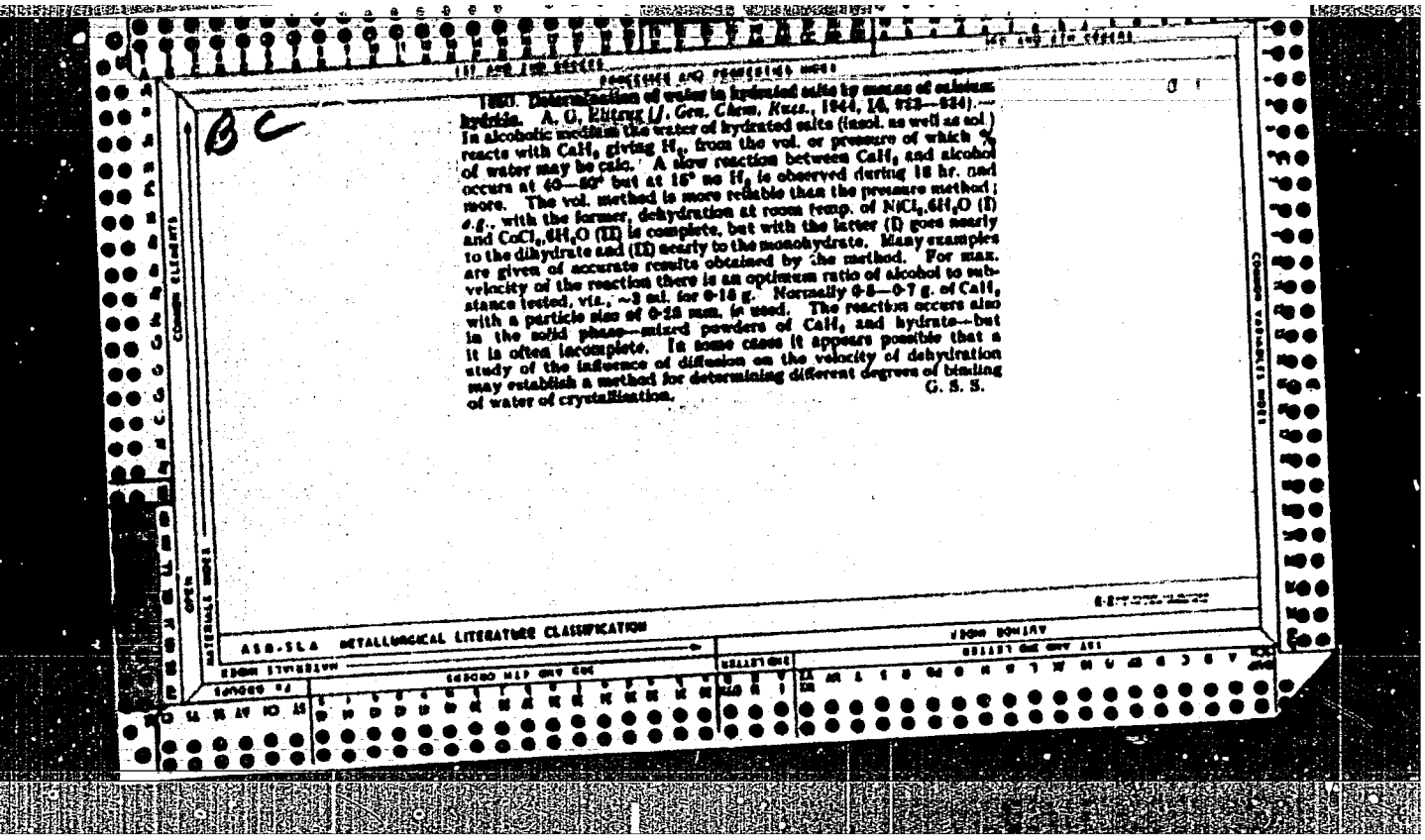
A-1

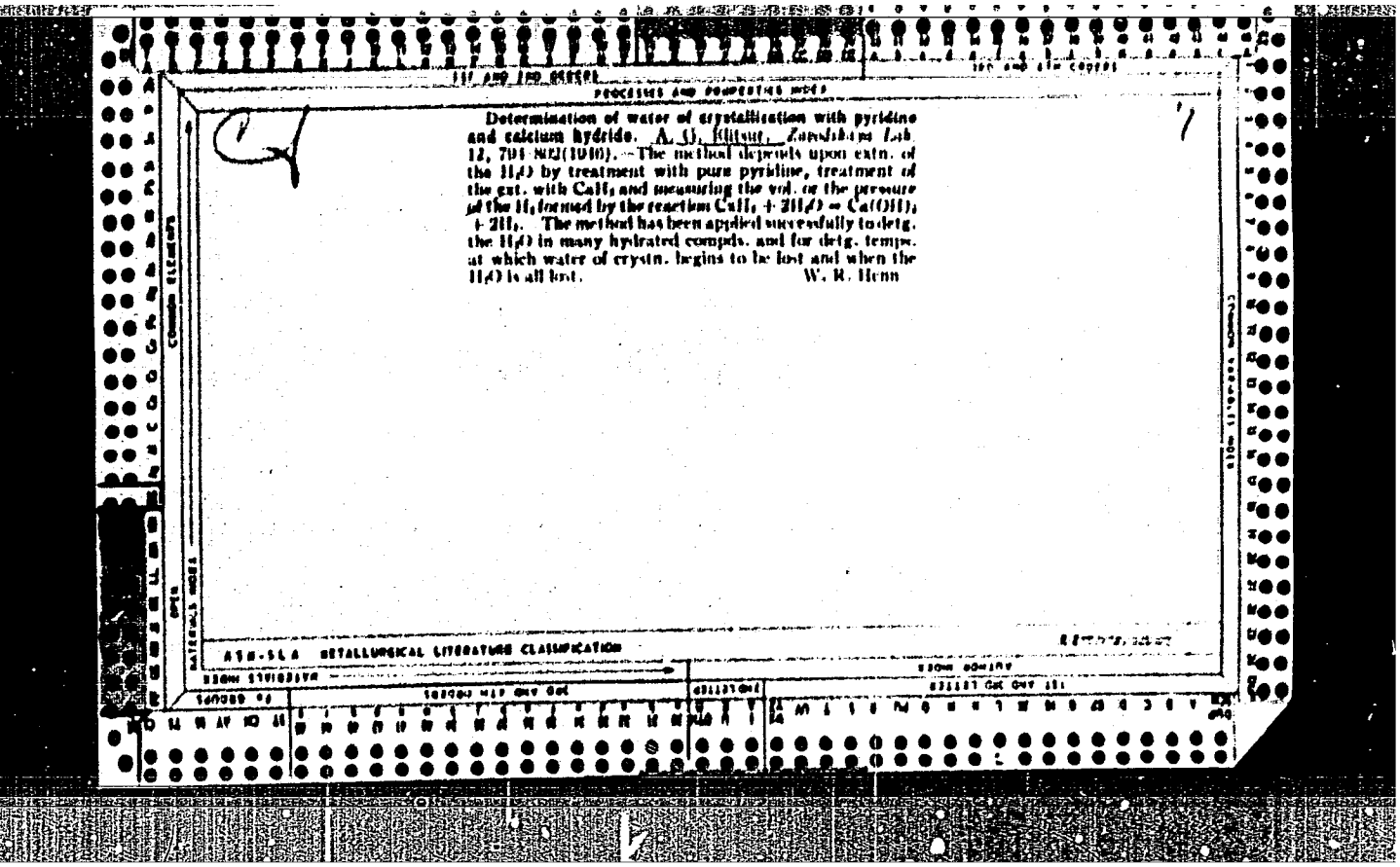
Hydride method of determination of water in aquo-complex compounds. A. G. Bityuzov. *J. Appl. Chem. Russ.*, 1941, 14, 683 - 687). Powdered CaH_2 is introduced into KOH; when evolution of H_2 has ceased, the compound to be analysed is introduced, and the H_2 evolved is measured. The method indicates, *e.g.*, 8·2 H_2O in $Na_2B_4O_7.8H_2O$, 2·0 H_2O in $K_2MgCl_4.6H_2O$, etc., but only 4·01 H_2O in $CuSO_4.5H_2O$. The rate of evolution of H_2 can also be measured; its changes in the course of one dehydration show the presence of differently bound H_2O mols. J. J. B.

A 5 8 - 5 L A METALLURGICAL LITERATURE CLASSIFICATION



B C

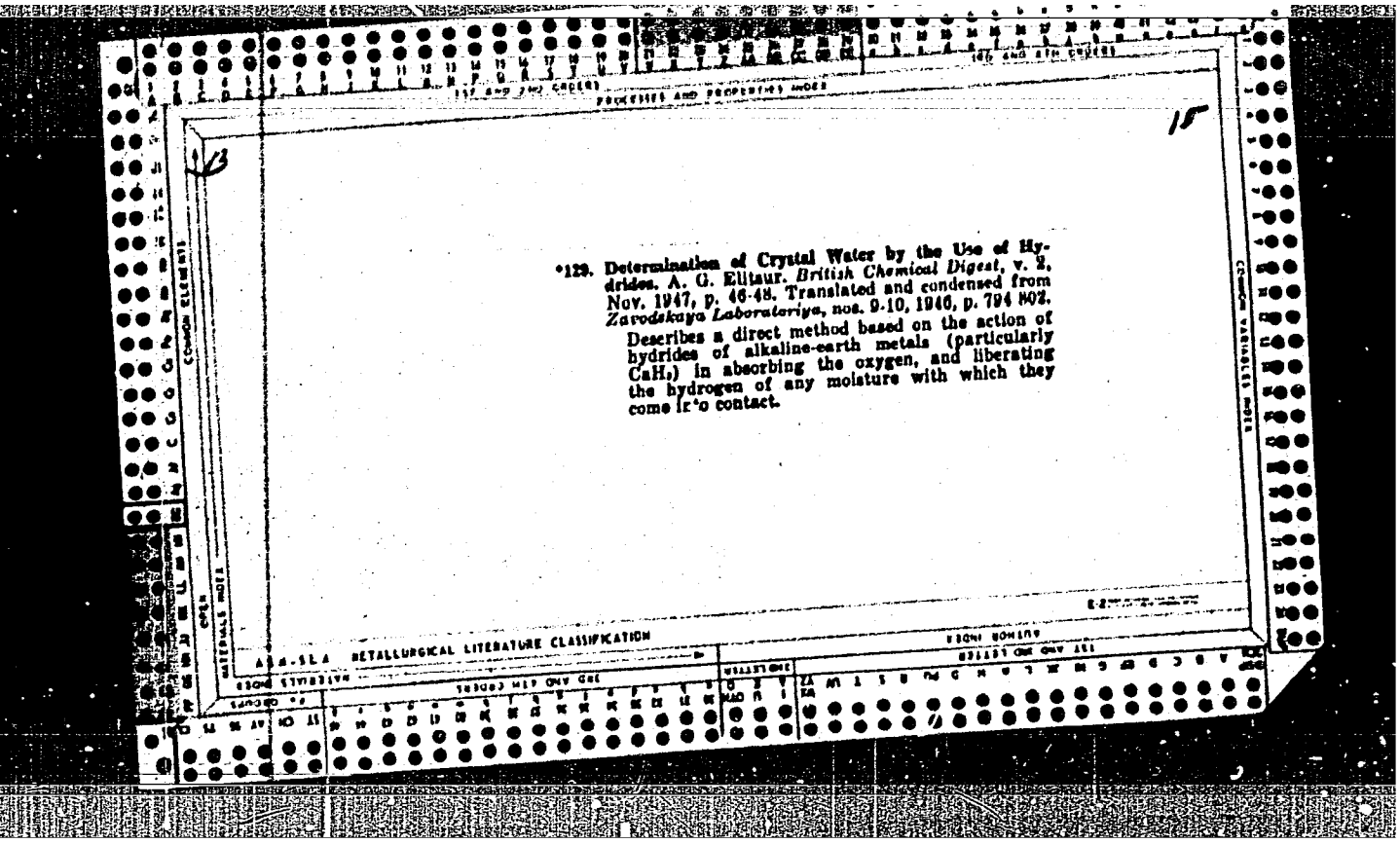
1807. Determination of water in hydrated salts by means of calcium hydride. A. G. Ritzes *J. Gen. Chem. Russ.*, 1944, 14, 823—824).—In alcoholic medium the water of hydrated salts (insol. as well as sol.) reacts with CaH_2, giving H_2, from the vol. or pressure of which % of water may be calc. A slow reaction between CaH_2 and alcohol occurs at 40—60° but at 15° no H_2 is observed during 18 hr. and more. The vol. method is more reliable than the pressure method; *e.g.*, with the former, dehydration at room temp. of $NiCl_2.6H_2O$ (I) and $CoCl_2.6H_2O$ (II) is complete, but with the latter (I) goes nearly to the dihydrate and (II) nearly to the monohydrate. Many examples are given of accurate results obtained by the method. For max. velocity of the reaction there is an optimum ratio of alcohol to substance tested, viz., ~3 ml. for 0·1 g. Normally 0·5—0·7 g. of CaH_2 with a particle size of 0·25 mm. is used. The reaction occurs also in the solid phase—mixed powders of CaH_2 and hydrate—but it is often incomplete. In some cases it appears possible that a study of the influence of diffusion on the velocity of dehydration may establish a method for determining different degrees of binding of water of crystallisation. G. S. S.



PROCESSES AND COMPOSITIONS INDEX

Determination of water of crystallization with pyridine and calcium hydride. A. S. Klitsur, *Zavodskaya Lab.* 12, 791 MRJ(1946).—The method depends upon extn. of the H_2O by treatment with pure pyridine, treatment of the ext. with CaH_2 and measuring the vol. or the pressure of the H_2 formed by the reaction $CaH_2 + 2H_2O = Ca(OH)_2 + 2H_2$. The method has been applied successfully to detg. the H_2O in many hydrated compds. and for detg. temps. at which water of crystn. begins to be lost and when the H_2O is all lost. W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



*129. **Determination of Crystal Water by the Use of Hydrides.** A. G. Elitaur. *British Chemical Digest*, v. 2, Nov. 1947, p. 46-48. Translated and condensed from *Zavodskaya Laboratoriya*, nos. 9-10, 1946, p. 794 ff02.

Describes a direct method based on the action of hydrides of alkaline-earth metals (particularly CaH_2) in absorbing the oxygen, and liberating the hydrogen of any moisture with which they come in contact.

ELITSUR, A. G.

6680 ELITSUR, A. G. --Rapid determination of the water content of blood serum. Biochimiay, Mosk. 1951, 16/1 (81-83) Tables 2 Illus. 1

The principle described was originally used for determination of water in chemicals (4 references). Now the method has been adapted for determination of water in blood serum. Special glass apparatus is used. The reaction is carried out in dry dioxan. Water from a measured portion of blood serum is allowed to react with calcium hydride and the volume of hydrogen is measured. The method is applicable also to other biological fluids.

Heyrovsk'y - Prague

SO: Excerpta Medica, Section II, Vol. 4, No. 12

YELITSUR, A. G.

Oct 51

USSR/ Chemistry - Hydrates

"Investigation of Hydrates by the Hydride Method," K. V. Astakhov, A. G. Yelitsur, K. M. Nikolayev.

"Zhur Obshch Khim" Vol XXI, No 10, pp 1753-1763.

Examd nature of Cu, Au, Cd, Al, Ga, Cr, Fe, Ni hydroxides, orthoboric and iodic acids, chloral hydrate, detg H_2O content by "Hydride" method, in which H_2O is leached from hydrate with pyridine, forming pyridine hydrate which reacts with alk earth metal hydrides to yield vol of H_2O equal to initial H_2O content of hydrate.

PA 194 T22

ELITSUR, A. G.

Chemical Abst.
Vol. 48 No. 4
Feb. 25, 1954
Inorganic Chemistry

Study of hydrates by the hydride method. K. V. Astakhov, A. G. Elitsur, and K. M. Nikolaev. *Zhur. Obshchei Khim.* 21, 1753-69(1951).—In the hydride method, water is detd. by removing water from the hydrate with pyridine, treating the pyridine hydrate, thus formed, with CaH_2 or other alk. earth hydride, and measuring the vol. of H_2 evolved. The method does not measure hydroxyl groups, only water bound as such. $Cu(OH)_2$, $Cd(OH)_2$, and $Ni(OH)_2$ did not show any water by the hydride method. $Au(OH)_3$ and $Ga(OH)_3$ gave up 1 mole H_2O per mole hydroxide; hence their structures are $HAuO_2.H_2O$ and $HGaO_2.H_2O$. $Al(OH)_3$ gave up 1 mole H_2O per 2 moles hydroxide, to form $Al_2O(OH)_4$. $Cr(OH)_3$ exists in the form $Cr_2O_3.xH_2O$, where x varies with the drying history of the material. $Cr_2O_3.4H_2O$ was the stable hydrate formed at 105°. More intense heating resulted in the formation of $Cr_2O_3.3H_2O$, and finally $Cr_2O_3.H_2O$, the latter at 220°. For Fe oxide no definite hydrate was found. With boric acid, dehydration below 10° gave 1 mole H_2O per mole acid, indicating the existence of $HBO_2.H_2O$. In the range 16–20°, dehydration resulted in the formation of $H_2B_4O_7$. Periodic acid hydrate gave up 2 moles H_2O per mole acid, indicating the structure $HIO_4.2H_2O$. Chloral hydrate contains 1 mole H_2O per mole of chloral, which corresponds to the accepted structure $CCl_3CHO.H_2O$; the nature of the bond holding the H_2O was not detd.

Arild J. Miller

7-27

PLYUSHCH, A.M.; ASADOV, A.I.; YELIYEV, A.A.

Some results of second shaft drilling in fields of the Oil Field Administration of the Artem Petroleum Trust. Azerb. neft. khoz. 41 no.11:30-31 N '62. (MIRA 16:2)
(Artem Island—Oil fields—Production methods)

Yelizabetin, M. A.

USSR/ Engineering - Machine tools

Card 1/1 Pub. 128 - 12/23

Authors : Satel', Z. A., and Elizabetin, M. A.

Title : The effect of hyraulic polishing methods on the exploitational charecteristics of the steel

Periodical : Vest. mash. 2, 51 - 55, Feb 1955

Abstract : The structure, operation and performance of a hydraulic installation for polishing machine components is described, and technical data are given on chemical composition of abrasive solutions, and the influence of hydraulic polishing methods on various characteristics of the steel. Graphs; drawings; illustrations.

Institution: .....

Submitted: .....

YELIZAROV SKIY, S.I., prof.

Evaluation of ligation of the internal thoracic artery for improving the blood supply of the heart. Khirurgiia 40 no.1:39-45 Ja '64. (MIRA 17:11)

1. Kafedra operativnoy khirurgii Arkhangel'skogo meditsinskogo instituta.

YELIZAROV, A., inzh.

Comprehensive norms for derrick construction in exploratory drilling. Sots. trud. no.8:137-138 Ag '58. (MIRA 11:9)

1. Otdel truda tresta "Stalingradneftegazrazvedka."
(Stalingrad Province--Boring--Production standards)

PAVLOVSKIY, B.; YELIZAROV, A.

More authority for work norm experts on drilling sites.
Sots.trud 4 no.7:132 Jl '59. (MIRA 13:4)

1. Nachal'nik otdela truda i zarplaty tresta "Stalingradneftegazrazvedka" (for Pavlovskiy). 2. Starshiy inzhener otdela truda i zarplaty tresta "Stalingradneftegazrazvedka" (for Yelizarov).
(Oil well drilling--Production standards)

YELIZAROV, A. A.

Yelizarov, A. A., Hydrological conditions and the fishing trade on the north slope of the Gusinaya Bank, Nauchno-tekhn. byul. Polyarn. n.-i. in-ta morsk. rybn. kh-va i okeanogr. (Scientific-Technical Bulletin of the Polar Scientific Research Institute of the Marine Fishing Economy and Oceanography), No 1(5), 1958, p 37-40; (RZhGeog 1/59-668)

YELIZAROV, A. A.

Yelizarov, A. A., Work on the expeditionary ship SRT-440 "A. Otkupshchikov" Nauchno-tekhn. byul. Polyarn. n.-i. in-ta morsk. rybn. kh-va i okeanogr. (Scientific and Technical Bulletin of the Polar Scientific Research Institute of Marine Fishing Economy and Oceanography), No 1(5), 1958, p 58-60; (RZhGeog 1/59-661)

YELIZAROV, A.A.

Annual fluctuations in the intensity of the Labrador and West Greenland Currents and the possibility of forecasting the temperature conditions in the commercial areas of the northwestern Atlantic Ocean. Okeanologiia 2 no.5:796-809 '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii (VNIRO).
(Atlantic Ocean--Ocean currents)
(Atlantic Ocean--Ocean temperature)

YELIZAROV, A.A.

Oceanographic conditions determining the yield of the generation of most important commercial fishes in the northwestern part of the northern Antarctic. Okeanologiia 3 no.6:1065-1078 '63. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii.

YELIZAROV, A.F.

Local application of pancreatin to deep burns. Khirurgiia 38 no.12:70-72 D '62. (MIRA 17:6)

1. Iz kliniki propedevticheskoy khirurgii (zav. - prof. S.P. Shilovtsev) Kuybyshevskogo meditsinskogo instituta.

YELIZAROV, A.F., ordinator

Use of pancreatin in deep burns; an experimental clinical study. Trudy Kuib. med. inst. 24:190-202 '63

1. Iz kafedry obshchey khirurgii (zav. - zasluzhennyy deyatel' nauki RSFSR prof. S.P. Shilovtsev). Kuybyshevskogo meditsinskogo instituta.

YELIZAROV, A.F., ordinator; KARASEV, N., student

Effect of mycerin on the flora of burns. Trudy Kuib. med. inst. 24:203-206 '63 (MIRA 17:4)

1. Iz kafedry obshchey khirurgii (zav. kafedroy - zasluzhennyy deyatel' nauki RSFSR prof. S.P. Shilovtsev) Kuybyshevskogo meditsinskogo instituta.

Y. L. IZAROV A. G.

SOLOVKOV, Aleksandr Konstantinovich; TRIFONOV, Aleksey Grigor'yevich; YELIZAROV, Aleksandr Georgiyevich; PANFILOV, M.I., redaktor; KEL'NIK, V.P., redaktor izdatel'stva; ZKF, Ye.M., tekhnicheskiy redaktor

[Laying and fettling of the hearth of open-hearth furnaces; practices of the Magnitogorsk Metal Combine] Kladka i navarka poda martenovskikh pechei; opyt Magnitogorskogo metallurgicheskogo kombinata. Sverdlovsk, Gos. nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1957. 109 p. (MLRA 10:7)
(Open-hearth furnaces)

VORONOV, F.D.; TRIFONOV, A.G.; KHUSID, S.Ye.; DIKSHTEYN, Ye.I.; VAL'PITER, E.V. SNEGIREV, Yu.B.; ANTIPIN, V.G.; Prinimali uchastiye: SMIRNOV, L.A.; KAZAKOV, A.I.; YELIZAROV, A.G.; KULAKOV, A.M.; KOZHANOV, M.G.; ZARZHITSKIY, Yu.A.; ARTAMONOV, M.P.; GOL'DENBERG, I.B.; ROMANOV, V.M.; NOVIKOV, S.M.; MAYEVSKIY, A.B.; DMITRIYEV, I.; MANZHULA, M.; BEREZOVOY, I.A.; ZUTS, K.A.; BADIN, S.N.; TATARINTSEV, G.; MITROFANOV, N.G.; GAVRILOVA, K.M.; IVANOV, N.I.

Operating a 400-ton open-hearth furnace on casing-head gas. (MIRA 14:5)
Stal' 20 no. 7:594-598 Jl '60.
(Open-hearth furnaces--Equipment and supplies)

YELIZAROV, A. I.

The consyruction of farm buildings. Moskva, Gos. izd-vo selkhoz lit-ry, 1954. 158 p. (Uchebniki i uchebnye posobiia dlia srednikh sel'skokhoziaistvennykh shkol po podgotovke predsedatelei kolkhozov)

YELIZAROV, Aleksandr Nikolayevich; NOVOSPASSKIY, V.V., red.; RAKOV, S.I., tekhn.red.

[The Caucasian ring; an automobile tour] Kavkazskoe kol'tso; avtomobil'nyi marshrut. Moskva, Izd-vo VTsSPS Profizdat, 1960. 126 p. (MIRA 14:6)

(Tourism)

PAVLOVSKIY, B.M.; YELIZAROV, A.P.

Results of intracrew planning of rigging maintenance operations. Neft.khoz. 34 no.5:65-67 My '56. (MLRA 9:8)
(Oil wells--Equipment and supplies)

YELIZAROV, A.S.

Automatic measuring waveguide line. Izm. tekh. no. 1:40-42 Ja '61. (MIRA 14:1)
(Electric measurements) (Wave guides)

9,257/
9,1300

34672
S/115/62/000/002/008/009
E192/E382

AUTHOR: Yelizarov, A.S.

TITLE: A method of measuring the nonreciprocal phase-shift in a rectangular waveguide with ferrite

PERIODICAL: Izmeritel'naya tekhnika, no. 2, 1962, 48 - 53

TEXT: The method proposed is free from the usual disadvantages of the known methods, where it is necessary to reverse by mechanical or electrical means the direction of propagation of electrical energy in a waveguide section with ferrite. The method of measuring the nonreciprocal phase-shift is based on the system illustrated in Fig. 1. In this the energy from a generator is fed through a measuring line into the arm A of a double T-junction. Here the energy is divided between the arms E and A and does not enter into the arm B, which is also terminated with a matched load. The arms E and H are connected by a waveguide section containing a ferrite element situated in a transverse magnetizing field. The required rotation of the polarization plane can thus easily be achieved. The portion of the energy entering into the arm E passes through this section

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A method of measuring ....

and returns through the section H into the junction and is divided between the arms A and B , without entering the arm E . This is principally due to the fact that the annular circulation of energy is eliminated. In the arm B the energy is absorbed by the matched load, while the energy from the arm A re-enters the measuring line. The energy entering the arm H undergoes analogous "transformations". The only difference is that the energy propagates in the opposite direction, through the section of the waveguide with ferrite. The measuring equipment (see Fig. 1a) consists of: 1 - HF generator which is amplitude-modulated by means of rectangular pulses; 2 - a buffer attenuator; 3 - measuring line; 4 - detector; 5 - amplifier with an indicator and 6 - the output stage (including the double T-junction). Three different waves exist in the measuring line: the wave propagating from the generator towards the junction (incident wave) and two waves propagating from the junction to the generator. These two waves can be regarded as being reflected from two loads having suitable reflection coefficients. The output stage can therefore be represented by

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A method of measuring ....

an equivalent circuit, shown in Fig. 2. If it is assumed that the waveguide section with a ferrite acts as a "valve" only with respect to the phase-shift, the moduli of the reflection coefficients for these loads can be assumed as being equal. The phases of the reflection coefficients will differ in the absence of an external magnetic field since the two waves propagate in opposite directions. It is shown that the non-reciprocal phase-shift can be expressed by:

$$\Delta\varphi = 2 \arccos \frac{(\sigma_o + 1)(\sigma - 1)}{(\sigma_o - 1)(\sigma + 1)} \qquad (6)$$

where σ is the standing-wave ratio of the system as defined by:

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A method of measuring ....

$$\sigma = \frac{1 + 2kp_o \cos \frac{\Psi_{1H} - \Psi_{2H}}{2}}{1 - 2kp_o \cos \frac{\Psi_{1H} - \Psi_{2H}}{2}} \qquad (2) .$$

The principal error in this method of measurement of $\Delta\varphi$ is caused by the systematic errors of the measuring line and these are analyzed in some detail. It is found from the analysis of the errors that the method can be used for the accurate measurement of the phase-shifts $\Delta\varphi \geq 90^\circ$. This limitation is usually quite acceptable since, in general, the ferrite sections having $\Delta\varphi = 90^\circ$ and $\Delta\varphi = 180^\circ$ found very wide applications. The method can primarily be used not in laboratories but in mass-production for checking the ferrite sections $\Delta\varphi = 90^\circ$ and $\Delta\varphi = 180^\circ$.
There are 4 figures and 2 Soviet-bloc references.

Card 4/5

YELIZAROV, A.S.

Measuring a nonmutual phase shift in a rectangular ferrite wave guide. Izm.tekh. no.2:48-53 F '62. (MIRA 15:2)
(Wave guide) (Frequency measurements)

YELIZAROV, A.S.

Using the method of standing waves for the calibration of attenuators. Izm.tekh. no.4:47-50 Ap '63. (MIRA 16:5)
(Attenuators (Electronics))

YELIZAROV, A.S.

Analysis of the performance of automatic thermistor bridges. (MIRA 18:3)
Izm. tekh. no.11:49-52 N '64.

YELIZAROV, A.V.

51-4 -3-2/30

AUTHORS: Bonch-Bruyevich, A.M. and Yelizarov, A.V.

TITLE: Double Luminous Layers in a High-Frequency Discharge in Hydrogen. (Dvoynyye svetyashchiyesya sloi v vysokochastotnom razryade v vodorode.)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol.IV, Nr.3, pp.289-295 (USSR).

ABSTRACT: The presence of luminous layers in high-frequency discharges in light gases (hydrogen and helium), each of these layers consisting of a pair of symmetrical luminous disks separated by a dark space, was reported in 1928-31 (Refs.1-3). Double luminous layers in hydrogen were observed in a wide range of pressures (from tenths to tens of mm Hg) and a wide range of frequencies from 100 kc/s to 10 Mc/s. Such layers were found in discharge gaps of various geometries, both with external and internal electrodes. It is assumed that appearance of such layers is related to some properties of high-frequency discharges or to peculiarities of discharges in light gases. The present paper reports new data obtained in connection with the study of the modulation characteristics of

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51-4-3-2/30

Double Luminous Layers in a High-Frequency Discharge in Hydrogen.

emission of a high-frequency discharge in hydrogen. The apparatus used is shown schematically in Fig.1. A glass discharge tube (P in Fig.1) was used with internal or external electrodes and was filled with hydrogen obtained by electrolysis. A high-frequency generator (Γ in Fig.1) produced a signal of 1 to 10 Mc/s. Voltage across the electrodes could be varied from 0 to 2000 V and the distance between the electrodes could be extended up to 100 mm. An image of the luminous layers was projected on to the entrance slit of a spectrograph (C in Fig.1). A photomultiplier, an amplifier and a valve voltmeter were used to record amplitudes of the harmonic components of modulation of the emission intensity. By means of two slits a portion of the discharge gap about 4 mm wide could be selected for modulation studies. Fig.2 shows photographs obtained on varying the current density in the discharge tube. At sufficiently high current densities (5×10^{-3} A/cm^2) the discharge gap was filled by a uniformly emitting column. Decrease of the current density produced first a dark space in the

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Double Luminous Layers in a High-Frequency Discharge in Hydrogen.

middle of the discharge gap (Fig.2a), then a double luminous layer (Fig.2b). With further decrease of the current density an increasing number of double layers (Fig.2, v, g, d) was observed. On decrease of the current density below a certain value the discharge takes up the form shown in Fig.2e. Replacing of internal by external electrodes does not affect the complex structure of the middle portion of the discharge. Various external influences (e.g. an earthed electrode placed outside the discharge tube, change of the interelectrode distance, or application of a magnetic field normal to the tube axis) cause displacements (or increase of the number) of double luminous layers without affecting the distance between the two luminous disks of which each such layer consists. This distance between the disks decreases with increase of hydrogen pressure (Fig.3). Fig.4 shows the emission spectra at 10 Mc/s of a double luminous layer (Fig.4a), a near-electrode portion of the discharge (Fig.4b), and a central portion of the discharge in the absence of double luminous layers

Double Luminous Layers in a High-Frequency Discharge in Hydrogen.

(Fig.4v). Fig.5a shows distribution along the discharge-tube axis of the mean value of the emission intensity (I_o) and of the first (I_1) and the second (I_2) harmonics of modulated emission by discharges with dark spaces in the middle (see Fig.2a). Fig.5b gives similar curves for a discharge with a single double luminous layer (shown in Fig.2b), while Fig.5v and Fig.6 give similar curves for discharges with two double layers (see Fig.2v). It is found that emission from the disks of which the luminous layers are composed is modulated in anti-phase with the applied voltage. A tentative explanation of the effects observed is proposed. Double luminous layers arise in the regions with high field intensities. On lowering of the discharge-current density, the field intensity in the middle (dark) portion of the discharge gap may rise. The double structure of luminous layers is ascribed to the presence of a potential well between the two disks. The edges of this potential well correspond to the positions of the two luminous disks.

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51-4-3-2/30

Double Luminous Layers in a High-Frequency Discharge in Hydrogen.

The causes of increased field intensity in the middle of the discharge gap and formation of the potential well are discussed. The authors point out that a full theory of the double luminous layer should take into account the presence of a continuous background spectrum. There are 6 figures and 9 references, of which 3 are Soviet, 3 German, 2 English and 1 American.

ASSOCIATION: State Institute of Optics imeni S.I. Vavilov. (Gosudarstvennyy opticheskiy institut im. S.I. Vavilova.)

SUBMITTED: May 10, 1957.

1. High frequency discharges---Luminous effects

Card 5/5

YALIZAROV, A. YA.

Stroitel'stvo sel'skokhozyaystvennykh postroyek. (The Building of Farm Structures). Moskva, Sel'khozgiz, 1954.
158 p. diagrs.
"Literatura": p. (159)
At head of title: Uchebniki i uchebnyye posobiya dlya srednikh sel'skokhozyaystvennykh shkol po podgotovkye predsedateley kolkhozov.

YELIZAROV, B.

107-12-23/46

AUTHOR: Yelizarov, B.

TITLE: 144-146-mc Ultrashort-Wave Radio Station (UKV radiostantsiya na 144-146 mgts)

PERIODICAL: Radio, 1956, Nr12, pp. 25-27 (USSR)

ABSTRACT: A description of an amateur-made walkie-talkie type radio transceiver station for two-way simplex communication within 1 km range is given. The following tubes are used: two 1П25 for the push-pull superregenerator, one 0.6П25 and one 1П25 for detection and a-f amplification. The same tubes are used for transmitter. 2.000-ohm head phone and piezoelectric microphone are used in the station. Battery supply lasts 12 to 15 hrs of continuous service. Receiver sensitivity 10-15 μv. Plate battery ГБ-СА-45 with the plate current 4 ma in reception and 5-7 ma in transmission is used in this station.

The station was exhibited at the 13-th All-Union Exhibition of Radio Hams' Constructions and had "attracted a great attention" there; the author was awarded the 3-rd prize in the VHF Section of the Exhibition.

AVAILABLE: Library of Congress

There are 3 figures in the article

Card 1/1

SOV/107-58-2-14/32

AUTHOR: Yelizarov, B.

TITLE: A Radio Station for 420-425 Megacycles (Radiostantsiya na 420-425 mgts)

PERIODICAL: Radio, 1958, Nr 2, p 24-26 and p 4 of center fold (USSR)

ABSTRACT: A portable, ultrashortwave radio station, working in the amateur range of 420-425 megacycles, is described. The device permits two-way communication at a distance of 1.5 km. Figure 1 shows the circuit diagram. The radio station consists of a separate transmitter and receiver which permit duplex operation, whereby it is necessary to have a frequency difference of about 2 megacycles. The HF part of the transmitter consists of a push-pull auto-oscillator with capacitive feedback composed of "2S3A" tubes. The transmitter frequency is fixed at 420 megacycles. The frequency modulation of the transmitter is achieved by changing the capacity of the germanium diodes "D2V". The modulator is a two-stage LF amplifier; the first stage is composed of one "06P2B" tube and the output stage is equipped with one "1P3B" and works on

Card 1/2

A Radio Station for 420-425 Megacycles

SOV/107-58-2-14/32

the load of the frequency modulator. The power at the transmitter output is 0.1 watt. The receiver is built as a super-regenerative detector, having two "2S3A" tubes in the push-pull arrangement. The LF preamplifier stage consists of a "P6V" transistor with grounded emitter. The second stage of the LF amplifier is a power amplifier with a "1P3B" tube, to whose anode circuit a high-ohm telephone is connected. The sensitivity of the receiver is about 15 microvolts.
There are 3 diagrams and 2 drawings.

1. Radio stations--Design 2. Radio stations--Operation
3. Radio stations--Equipment

Card 2/2

SOV/107-58-10-36/55

AUTHOR: Yelizarov, B.

TITLE: Ultra-Shortwave Radio Stations for One-Way Communication on 144-146 mc (UKV radiostantsii dlya odnostoronnoy svyazi na 144-146 m.g.ts.)

PERIODICAL: Radio, 1958, Nr 10, pp 42-45 (USSR)

ABSTRACT: Two types of portable radio-sets for one-way communication on 144-146 mc are described: one is intended for training parachutists and glider-pilots, with a range of 15 km, and the other for transmitting the signalman's commands to the tower-crane operator during rigging work, and has a range of 500 m in town conditions. The h-f unit of the transmitter of the former model comprises a two-stroke ultra-shortwave autogenerator with capacitive feedback mounted on a type 6N3P twin triode. A quarter-wave antenna is used. The receiver is assembled according to a straight amplification circuit, and has an h-f amplifier, a super-regenerative detector and a low-frequency amplifier. The antenna is a nonsynchronous, half-wave vibrator made out of type RK-19 coaxial cable. The h-f unit of the transmitter for use in crane operations is mounted on type 2S3A battery ultra-shortwave triodes. The antenna is a quarter-wave rod. The receiver has one aperiodic

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Ultra-Shortwave Radio Stations for One-Way Communication on 144-146 mc

h-f amplification stage assembled as a circuit with grid grounding. The antenna is a half-wave nonsynchronous vibrator which is connected up to the inlet of the receiver by means of type RK-1 coaxial cable (the author describes how this is done). Both radio sets have been working satisfactorily for over six months. Details of their working and adjustment are given.
There are 4 circuit diagrams and 2 diagrams.

YELIZAROV, B., master radiolyubitel'skogo sporta.

Miniature shortwave radio transceiver. Radio no. 11:28-30 N '60. (MIRA 14:1)
(Radio, Shortwave—Transmitters and transmission)